

Claim Amendments

1. (currently amended) A system for providing data communications between a first digital subscriber line data device and a network switch comprising:

a pilot branch for communicating with the first digital subscriber line data device via pilot signals when the first digital subscriber line data device is in a sleep mode;

a data branch for providing data communications between the first digital subscriber line data device and the network switch when the first digital subscriber line data device is active;
and

a controller circuit for monitoring the pilot signals and for switching the first digital subscriber line data device from the pilot branch to the data branch when the first digital subscriber line data device becomes active based on the pilot signals;

wherein the controller circuit comprises a crosspoint device for switching the first digital subscriber line data device from the pilot branch to the data branch and for switching a second digital subscriber line data device from the data branch to the pilot branch when the first digital subscriber line data device is switched from the pilot branch to the data branch in response to the controller, and

wherein the controller circuit monitors operation of the second digital subscriber line data device and, based on the monitored operation, instructs the crosspoint device to switch the second digital subscriber line data device.

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (currently amended) The system as recited in claim 5 ~~1~~ wherein the controller circuit detects when the second digital subscriber line data device is inactive and instructs the crosspoint device to switch the second digital subscriber line data device from the data branch to the pilot branch when the second digital subscriber line data device is inactive.

7. (previously amended) The system as recited in claim 1 wherein the controller circuit comprises:

a receiver grid for switching data communications received from the first digital subscriber line data device to the network switch from the pilot branch to the data branch; and

a transmit grid for switching data communications transmitted from the network switch to the first digital subscriber line data device from the pilot branch to the data branch.

8. (original) The system as recited in claim 7 wherein the controller circuit comprises:

a controller for instructing the receiver grid and the transmit grid to switch the data communications based on the pilot signals.

9. (original) The system as recited in claim 1 wherein the pilot signals are single tone carrier signals.

10. (previously amended) A system for routing data transmitted over a digital subscriber line that couples a communication interface and an interface circuit comprising:

a pilot circuit transmitter for transmitting a pilot signal to the communication interface;

a crosspoint circuit for receiving a wake-up signal in response to the pilot signal from the interface circuit; and

a controller for determining a route of the wake-up signal over the digital subscriber line and for instructing the crosspoint circuit to transmit the wake-up signal in accordance with the determined route.

11. (original) The system as recited in claim 10 wherein the pilot signal is a single tone carrier signal.

12. (original) The system as recited in claim 10 comprising:

a data branch for providing data communications between the communication interface and the interface circuit; and

wherein the controller instructs the crosspoint circuit to transmit the wake-up signal to the data branch to establish the data communications between the communications interface and the interface circuit.

13. (original) The system as recited in claim 12 wherein the data branch comprises:

a XDSL transmitter for transmitting the data communications from the communication interface to the interface circuit; and

a XDSL receiver for receiving the data communications from the interface circuit via the communications interface.

14. (original) The system as recited in claim 12 wherein the data communications are digital subscriber line communications.

15. (original) The system as recited in claim 14 wherein the data communications are asymmetric digital subscriber line communications.

16. (original) The system as recited in claim 14 wherein the data communications are asymmetric digital subscriber line lite communications.

17. (original) The system as recited in claim 14 wherein the data communications are very high speed digital subscriber line communications.

18. (canceled)

19. (canceled)

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33. (canceled)

34. (canceled)

35. (canceled)

36. (canceled)

37. (canceled)

38. (canceled)

39. (currently amended) ~~The system of claim 1~~ A system for providing data communications between a first digital subscriber line data device and a network switch comprising:

a pilot branch for communicating with the first digital subscriber line data device via pilot signals when the first digital subscriber line data device is in a sleep mode;

a data branch for providing data communications between the first digital subscriber line data device and the network switch when the first digital subscriber line data device is active;

a controller circuit for monitoring the pilot signals and for switching the first digital subscriber line data device from the pilot branch to the data branch when the first digital subscriber line data device becomes active based on the pilot signals~~The system of claim 1,~~
wherein the first digital subscriber line data device employs the pilot branch only while in the sleep mode;

wherein the first digital subscriber line data device employs the data branch only while in the active mode.

40. (previously added) The system of claim 10, wherein the pilot circuit transmitter transmits the pilot signal to the communication interface only while the communication interface is in a sleep mode.